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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,557	12/20/2001	Michael V. Chobotov	24641-1060	4695

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EXAMINER	
MUSSER, BARBARA J	

ART UNIT	PAPER NUMBER
1733	

DATE MAILED: 07/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/029,557	CHOBOTOV ET AL.	
	Examiner	Art Unit	
	Barbara J. Musser	1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-48 is/are pending in the application.

4a) Of the above claim(s) 38-48 is/are withdrawn from consideration.

5)☒ Claim(s) 1-8 and 10-18 is/are allowed.

6)☒ Claim(s) 9,19-28,31-33 and 35-37 is/are rejected.

7)☒ Claim(s) 29,30 and 34 is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 3/21/05.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 3, it is unclear exactly what the first compound is since the claim can be read as either requiring perfluoroalkoxy or requiring perfluoroalkoxy ethylene propylene.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claim 1 is rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Van Schaftingen et al.(U.S. Patent 6,866,812).

Van Schanftingen et al. discloses applying a first layer of fusible material onto a mold surface, applying a second layer to the first to form an overlap, forming a seam to form a closed object(welding), and expanding the closed space(blowing).(Col. 2, ll. 59-Col. 3, ll. 4, 19-23) The reference discloses the welding and blowing can occur in any order.(Col. 2, ll. 59-63) While the references does not explicitly state the fusible material is cooled, one in the art would understand that the material would be cooled so that the shape formed would remain. Fixing is considered to include any process that would prevent the fusible material from collapsing after expansion.

Alternatively, it would have been obvious to one of ordinary skill in the art at the time the invention was made to cool the hollow body since this would prevent its collapse upon removal from the mold.

6. Claims 1, 10, 15, 16, and 18 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kruck et al.(U.S. Patent 5,168,621).

Kruck et al. discloses applying a first layer of fusible material onto a mold surface, applying a second layer to the first to form an overlap, sealing the layers

together to form a closed object, and expanding the closed space(blowing).(Abstract) While the references does not explicitly state the fusible material is cooled, one in the art would understand that the material would be cooled so that the shape formed would remain. This cooling is considered a type of fixing as it fixes the shape of the fusible material in the expanded state.

Alternatively, it would have been obvious to one of ordinary skill in the art at the time the invention was made to cool the hollow body since this would prevent its collapse upon removal from the mold.

Regarding claim 10, the reference discloses a rigid insulation panel can be placed between the two fusible layers which can expand under pressure and temperature.(Col. 15, ll. 37-44)

Regarding claim 15, air is forced into the space between the layers.(Col. 15, ll. 2-6)

Regarding claim 18, since the fusible layers surround the foam completely(Figure 19), one in the art would understand that the seams were formed around the foam layers to mechanically capture it between the layers.

7. Claims 1, 7, 8, and 29 are rejected under 35 U.S.C. 102(a) and (e)) as being anticipated by McDermott et al.(U.S. Patent 6,312,462).

McDermott et al. discloses forming a graft by placing a first material on a mandrel, placing a seconds material on the first, and bonding the two together to form channels.(Col. 6, ll. 62-67; Figure 3) The device can then be placed into the human

body and expanded. It is then fixed in placed by polymerization of the expansion fluid.(Col. 4, ll. 15-56)

Regarding claim 7, the fusible material is PTFE.(Col. 6, ll. 60)

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 1-3, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rogers et al. in view of Philips et al.(WO 99/37242).

Rogers et al. discloses applying two layers of fusible material separately to a shape forming member(Figure 10) and selectively fusing the material at seams to form at least one inflatable channel to form a graft.(Col. 3, ll. 51-64) After formation, the channels are expanded within the human body(Figure 6). The reference does not disclose fixing the fusible material. Philips et al. discloses applying barbs or bristles to the outside of the graft to retain it in place.(Pg. 9) It would have been obvious to one of ordinary skill in the art at the time the invention was made to have barbs on the outside of the fusible material making the graft since this would prevent movement of the graft within the human body.(Pg. 9) This is considered a method of fixing the fusible material since it prevents the fusible material from collapsing.

Regarding claim 2, the layers are joined together using adhesive.(Col. 3, ll. 63)

Regarding claim 3, the types of adhesive usable with PTFE are well-known and conventional in the art, and it would have been obvious to use any well-known and conventional adhesive for bonding PTFE layers together since such adhesives are well-known and conventional.

Regarding claim 6, while Rogers et al. does not disclose multiple fusible layers, it does indicate that the first fusible layer can be coated with expanded PTFE(Col. 2, ll. 61-64), indicating that it is known to compose the inner layers of multiple layers. It would have been obvious to one of ordinary skill in the art at the time the invention was made to place multiple layers on the mandrel, forming the inflatable chamber between the outer layers since it is known in general to make the inner layer of the graft from multiple layers and since making a single layer from multiple thinner original layers is known in general in the bonding arts.

Regarding claim 7, the fusible material is PTFE.(Col. 2, ll. 55-64)

Response to Arguments

No arguments were presented.

Allowable Subject Matter

10. Claims 4, 5, 11-14, and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. Claims 30 and 34 are allowed.

12. The following is a statement of reasons for the indication of allowable subject matter: Regarding claims 4 and 17, the prior art of record does not teach or fairly suggest sintering the fusible material while the channel is expanded. Regarding claims 10 and 18, if the claim is amended to include that a graft is formed and that the fixing occurs on the mandrel or outside the human body, the prior art of record does not teach or fairly suggest including an expandable member in a graft between two fusible members wherein the channel containing the expandable member is expanded and fixed in the expanded state. The expandable member is not considered to expand the inflatable channel since expansion of the member would expand the entire article and not the channel within the article. Regarding claim 30, the prior art of record does not teach or fairly suggest the mandrel having a middle section smaller than the end sections. Regarding claim 34, the prior art of record does not teach or fairly suggest the pressure line comprising a tubular member with a plurality of apertures whose cross-sections increase in size along the tubular member.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara J. Musser whose telephone number is (571) 272-1222. The examiner can normally be reached on Monday-Thursday; alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571)-272-1156. The fax phone

number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BJM

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